REMARKS

The Office Action of March 30, 2010, was received and carefully reviewed. Claims 60-88 were pending in the application prior to this amendment. By this amendment, claims 60, 66, 68, 71 and 83 are amended, and claims 65, 67, 69, 80, 85 and 86 are canceled. No new matter has been added. Thus, claims 60-64, 66, 68, 70-79, 81-84, 87 and 88 are currently pending for consideration.

The undersigned notes that the Office Action Summary Sheet states that Claims *66*-88 are pending and rejected in the application. However, as correctly addressed by the Examiner in his Office Action, claims 60-88 were pending.

Claims 60-88 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,477,703 to Hanchar et al. ("Hanchar").

Amended claim 60 recites a subterranean water sump structure comprising a substantially water impermeable member which is adapted, in use, to collect rainfall or other precipitation from above the ground and trap the water below the ground. At least one heat exchange pipe carries a heat exchange fluid and is located, in use, so as to pass through water trapped by the impermeable member. A primary particulate material through which the at least one heat exchange pipe passes has primary particles and is overlaid by a water permeable layer of secondary particulate material having secondary particles. The size of the secondary particles is greater than the size of the primary particles.

Hanchar discloses a geothermal cell that cannot be used as a subterranean water sump structure. As is well established, a sump is traditionally a hole providing a space into which water or fluid can drain. As recited in claim 60, the sump structure of the present invention collects "rainfall or other precipitation from above the ground and traps the water below the ground." In contrast, Hanchar's geothermal cell includes a top barrier 26A which is disclosed as being placed over barrier 26 and secured in place with hydraulic silicone sealant.

Furthermore, Hanchar teaches that the geothermal structure is filled with fresh, clean water until the level reaches a normal level. Accordingly, Hanchar's structure could not be used or adapted to collect rainfall or other precipitation.

Additionally, although Hanchar describes the use of gravel 28 within the geothermal cell, it does not disclose or suggest the use of two layers of particulate material – "primary particulate material through which said at least one heat exchange pipe passes, said primary particulate material having primary particles and being overlaid by a water permeable layer of secondary particulate material having secondary particles; and wherein the size of the secondary particles is greater than the size of the primary particles," as recited in amended claim 60. As discussed in the present application, such an arrangement is particularly advantageous with regard to encouraging drainage of ground water and rainfall through the upper layer towards the lower layer of particulate material as this allows superior storage and retention of water within the sump, as well as, improved thermal conductivity within the sump.

Given the above, it is respectfully submitted that Hanchar does not disclose each and every element of the claims. Accordingly, claims 60-64, 66, 68, and 70-79 are allowable of Hanchar.

Amended claim 80 recites a method of forming a subterranean water sump structure, comprising the steps of providing a substantially water impermeable member for collecting rainfall or other precipitation from above the ground and trapping it below the ground, providing at least one heat exchange pipe for carrying a heat exchange fluid, passing the at least one heat exchange pipe through an area in which water collected, in use, is trapped by the impermeable member, filling the structure through which the at least one heat exchange pipe passes with primary particulate material having primary particles, and overlaying the primary particulate material with a water permeable layer of secondary particulate material having secondary particles, wherein the size of the secondary particles is greater than the size of the primary particles.

For the reasons set forth above with regard to claim 60, claim 80 is also allowable over the teachings of Hanchar. Accordingly, claims 80-84, 87 and 88 are allowable.

Based on the foregoing, Applicant submits that the application is in condition for allowance, and a notice of allowance is earnestly sought.

Respectfully submitted,

/Corinne R. Gorski, Reg. No. 34,339/
Corinne R. Gorski
Registration No. 34,339

NIXON PEABODY LLP
401 9th Street, N.W.
Suite 900
Washington, D.C. 20004-2128
(202) 585-8000